

# MC24: Simulations des colloïdes

Organisateurs : A. Videcoq & Y. Hallez

**Vendredi 26 août – 8h30- 10h00**

**08:30 - 09:00 Enhanced dynamics of colloids controlled by local phase coexistence**

**INVITÉ** V. Dahirel, J. Decayeux, P. Illien and M. Jardat  
*Sorbonne Université, CNRS, Laboratoire PHENIX, Paris, France.*  
**MC24-1** *vincent.dahirel@sorbonne-universite.fr*

**09:00 - 09:15 Combining force inference and holographic microscopy to measure colloidal interactions**

**MC24-2** F. Benedetti<sup>a</sup>, T. Sagahei<sup>b</sup>, P. D. J. van Oostrum<sup>b</sup> and E. Bianchi<sup>a,c</sup>  
*a. Institut für Theoretische Physik, Technische Universität Wien, Austria*  
*b. Institute for Biologically Inspired Materials, Universität für Bodenkultur Wien, Austria*  
*c. CNR-ISC, Uos Sapienza, Roma, Italy*  
*emanuela.bianchi@tuwien.ac.at*

**09:15 - 09:30 Coarse-grain shape dynamics for molecular simulation of soft colloids**

**MC24-3** N. Martzel<sup>a</sup>, A. Dequidt<sup>b</sup>, J. Devémy<sup>b</sup>, R. Blaak<sup>b</sup>, S. Garruchet<sup>a</sup>, B. Latour<sup>a</sup>, F. Goujon<sup>b</sup>, E. Munch<sup>a</sup> and P. Malfreyt<sup>b</sup>  
*a. Manufacture Française des Pneumatiques Michelin, Clermont-Ferrand, France*  
*b. Université Clermont Auvergne, CNRS, SIGMA Clermont, Institut de Chimie de Clermont-Ferrand, France*  
*nicolas.martzel@michelin.com, alain.dequidt@uca.fr*

**09:30 - 09:45 Brownian Motion near a Soft Surface**

**MC24-4** Y. Ye<sup>a,b</sup>, Y. Amarouchene<sup>a</sup>, D. Dean<sup>a</sup> and T. Salez<sup>a</sup>  
*a. Univ. Bordeaux, CNRS, LOMA, UMR 5798, Talence, France*  
*b. Ecole Normale Supérieure, Paris, France*  
*yilin.ye@ens.psl.eu*

**09:45 - 10:00 Control of the shape of few-particles clusters with external fields using Dynamic Programming and Reinforcement Learning**

**MC24-5** O. Pierre-Louis, F. Boccoardo and Y. Benamara  
*Institut Lumière Matière, UMR5306 Université Lyon 1-CNRS, Lyon, France*  
*olivier.pierre-louis@univ-lyon1.fr*

## Posters

MC24-6

### Simulations of anisotropic colloids

**M. Cerbelaud<sup>a</sup>**, K. Lebdioua<sup>a</sup>, A. Aimable<sup>a</sup>, R. Ferrando<sup>b</sup> and A. Videcoq<sup>a</sup>

*a. Université de Limoges, CNRS, IRCER, UMR 7315, Limoges, France*

*b. Dipartimento di Fisica dell'Università di Genova and CNR-IMEM, Italy*

*manuella.cerbelaud@unilim.fr*

MC24-7

### An example of a simulation technique for colloids with hydrodynamic interactions

**A. Videcoq<sup>a</sup>**, T. Ala-Nissilä<sup>b,c</sup>, R. Ferrando<sup>d</sup> and M. Cerbelaud<sup>a</sup>

*a. Université de Limoges, CNRS, IRCER, UMR 7315, Limoges, France*

*b. COMP CoE at the Department of Applied Physics, Aalto University School of Science, Espoo, Finland*

*c. Departments of Mathematical Sciences and Physics, Loughborough University, Loughborough, UK*

*d. Dipartimento di Fisica dell'Università di Genova and CNR-IMEM, Italy*

*arnaud.videcoq@unilim.fr*

MC24-8

### SRD-MD simulations of colloidal suspensions in confined environments

**H. Semaan<sup>a</sup>**, M. Cerbelaud<sup>a</sup>, B. Crespin<sup>b</sup> and A. Videcoq<sup>a</sup>

*a. Université de Limoges, CNRS, IRCER, UMR 7315, Limoges, France*

*b. Université de Limoges, CNRS, XLIM, UMR 7252, Limoges, France*

*hanady.semaan@unilim.fr*